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EXAMINER

JOSEPH, THOMAS J

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 16

Application Number: 09/531,005  
Filing Date: March 20, 2000  
Appellant(s): CHOI ET AL.

VIDEO DISPLAY APPARATUS HAVING HOTKEY FUNCTIONS AND A METHOD  
THEREFOR  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 28 August 2003 and 9 October 2003.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences, which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

Appellant's brief includes a statement that claims 1 - 10 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

**(8) *Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) *Prior Art of Record***

6,211,870

Foster

9-2000

**(10) Grounds of Rejection**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurtenbach et al (US 6,414,700) and Foster (US 6,211,870).

**Claim 1:**

Kurtenbach teaches use of a GUI for operating hotkeys (col. 1, lines 35 – 55). This GUI, corresponding to hotkeys, uses a video display control apparatus having hotkeys for a user to invoke and control functions associated with the video apparatus, wherein said function is represented by a menu item from an on-screen display (OSD) menu, along with said video display control apparatus (fig. 1; col. 1, lines 35 – 55). The use of computerized hotkeys inherently teach using a memory unit coupled to the button unit, that are adapted for storing information concerning OSD menu items. Further, the said computerized hotkeys teach a button unit comprising at least of one hotkey button adapted for generating a key signal corresponding to a menu item on the OSD menu. Any button on an input device such as a keyboard or mouse acts as this key. The use of the said computerized hotkeys teaches a control unit for receiving said key signal from said button unit; for reading information concerning an OSD menu item stored in

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the memory unit, when said key signal is received; and for thereupon sending a control signal to the video display apparatus to control a function thereof. Kurtenbach fails to teach an OSD unit for outputting an OSD character display signal to a video processing unit in response to a said key signal, whereby actuation by a user of said hotkey button causes a screen display of one or more OSD characters. However, Kurtenbach does suggest the need for specific personalize hotkeys by proposing a GUI containing numerous operations that are accessible with a minimum number of cursor selections (fig. 1; col. 1, lines 35 – 55). This need also suggest the need for key actuations.

Foster teaches an editing system wherein the user can essentially create a customized hotkey (col. 10, lines 55 – 65). This customization allows the user to actuate a personal hotkey while causing the screen to display one or more OSD characters. It would have been obvious to one with ordinary skill in the art at the time of the invention to combine the hotkey actuations disclosed by Foster with the GUI coupled with hotkeys taught by Kurtenbach. Doing so gives the user the capability to establish personalized hotkeys. Such personalized programming of keys allows the user to program a remote control panel based on functionality instead of compactness (col. 3, lines 19 – 23).

**Claim 2:**

Kurtenbach teaches a video display control apparatus wherein the OSD menu displays one or more OSD menu items on the screen of the video display apparatus (fig. 1).

**Claim 3:**

Foster teaches a method for a user to program personal hotkeys (fig. 1, #1050, #1166). Such a method is a detector for determining whether present-time information corresponds to an OSD menu item selected at a present time is identical to past-time information corresponding to an OSD menu item and already stored in the memory unit. Further, the present-time information is not identical to said past-time information, for enabling storage of said present-time information in the memory unit.

**Claim 4:**

Kurtenbach fails to teach a video display control apparatus wherein said function of a video display apparatus is selected from the following group: audio mute, audio volume control, screen position, screen contrast, screen brightness, color, and tint. Foster teaches a video display control apparatus wherein said function of a video display apparatus is selected from the following group: audio mute, audio volume control, screen position, screen contrast, screen brightness, color, and tint (fig. 7). The figure provides a specific mute key. It would have been obvious to one with ordinary skill in the art at the time of the invention to combine the audio mute, audio volume control, screen position, screen contrast, screen brightness, color, or tint controller taught by Foster with the GUI coupled with hotkeys taught by Kurtenbach. Doing so gives the user the ability to customize video and audio output control keys.

**Claims 5, 6, and 7:**

Kurtenbach and Foster teach the rationale for claims 5, 6, and 7 in rejected claim 1.

**Claim 8:**

Kurtenback and Foster teach the rationale for claim 8 in rejected claim 1. Foster teaches a TV system (fig. 11). The remote control system taught by Foster requires a TV system. Foster teaches OSD menu items on a display (fig. 10, #1166). These display items require a memory unit adapted for storing information concerning the said OSD menu items. Foster demonstrates a means for a user to select one of said plurality of menu items (fig. 10, #1065). Foster teaches a means for generating a selection signal corresponding to one of said plurality of menu items (fig. 10, #1065). This is a response to the user's selection. Foster teaches a control means for controlling one of said plurality of functions (fig. 11, #1050, #1161, #1162). Foster teaches associating with the TV display, a receiving means for said selection signal (fig. 10, #1166). The remote control taught by Foster requires an associated TV display for receiving the signal from the selected button. Foster teaches coupling a said receiving means for reading means for fetching and reading from the memory unit information concerning an OSD menu item stored in the memory unit wherein said selection signal is received and said information corresponds to said selection signal (fig. 10, #1166). When the programmed button or icons is selected, a selected signal is received along with data or information corresponding with the said selected signal. Foster teaches a coupling to a means for sending a control signal to the control means, said control signal corresponding to said fetched and read information concerning an OSD menu item, whereby a function of the TV display is controlled responsively to the control signal and responsively to said information fetched and read from the memory unit concerning

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an OSD menu item (fig. 10, #1166). All software and selected items associated with a GUI accesses information stored in memory associated with the selected item.

**Claim 9:**

Foster teaches a TV system (fig. 11). The remote control system taught by Foster requires a TV system. Foster teaches the display of video data on a display screen (fig. 11). Such a display requires a video processing unit. The claim language fails to explain within the claim language the type of video processing required.

Foster teaches a means for outputting an OSD character display signal to the video processing unit in response to said selection signal (fig. 11, #1166). The buttons disclosed by Foster provide a method for controlling a video processing system in response to a user selection signal.

Foster teaches associating with the video processing unit, an actuation means for receiving said OSD character display signal and for causing responsively thereto a screen display of one or more OSD characters, said one or more OSD characters corresponding to said menu item of the OSD menu (fig. 11, #1166).

**Claim 10:**

Foster teaches a TV system (fig. 11). The remote control system taught by Foster requires a TV system. Foster teaches a means for determining whether a selection signal is identical to a signal stored in the memory unit and associated with information concerning an OSD menu item (fig. 11, #1166).

Foster teaches a means for executing a selected control function of the TV display in response to the selection signal if the selection signal is identical to a signal



stored in the memory unit (fig. 11, #1166). When the user selects a button corresponding to a given selection, a signal identical to a signal stored in the memory unit results in executing a selected control function.

Foster teaches a means for executing a default control function of the TV display in response to the selection signal if the selection signals is not identical to a signal stored in the memory unit (fig. 11, #1166). When the user fails to select a button corresponding to a given selection, a signal not identical to a signal stored in the memory unit results in executing a default control function. A default control function includes displaying various options while awaiting selection from the user.

**(11) *Response to Argument***

3. The Appellant responds to the rejection of claim 1 by asserting that Kurtenback and Foster cannot be combined. The Appellant asserts while the Examiner provides general references, the Examiner fails to provide specific correlations with appropriate citations from the cited patents. The Examiner responds by stating that it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the hotkey actuations taught by Foster with the GUI coupled with hotkeys taught by Kurtenback. Doing so gives the user the capability to establish personalized hotkeys. The Examiner asserts that customizing keys on a keyboard or GUI enables the user to customize an application according to personalized needs. This is a capability that is included with numerous software packages.

The Appellant asserts that the previous office action does not contain findings supporting existence of a specific teaching, suggestion, or motivation in the prior art of Foster and Kurtenbach. The Examiner asserts that both Foster and Kurtenbach teaching use of buttons or program keys that enable the user to execute a function in a timesaving manner, which is a popular capability provided by software developers. This is a type of hotkey customization. The motivation for providing such customization empowers the user to customize buttons according to personal needs. This customization is also actuation. Furthermore, personalized programming of keys allows the user to program a remote control panel based on functionality instead of compactness (Foster, col. 3, lines 19 – 23).

The Appellant responds to the rejection of claim 8 by stating that the Examiner provides no reasons for combining Kurtenbach and Foster. The Examiner responds by stating that the same rationale for combining Kurtenbach and Foster used in claim 1 was also applied to claim 8 in the previous office action.

For the above reasons, it is believed that the rejections should be sustained.

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Respectfully submitted,

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October 17, 2003

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